



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/528,279

08/18/2005

Jiri Babej

67562.21

2952

58785 7590 08/19/2008
HUNTON & WILLIAMS/NEW YORK
INTELLECTUAL PROPERTY DEPT.
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER

REESE, DAVID C

ART UNIT

PAPER NUMBER

3677

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,279	Applicant(s) BABEJ ET AL.	
	Examiner David C. Reese	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,12,13,34 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-11,14-33,36 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- Claims 6-7, 12-13, and 34-35 are withdrawn (see below).
- Claims 1-37 are pending.

Election/Restrictions

[1] Claims 6-7, 12-13, and 34-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant's election of the species to Group I without traverse of Claims 1-37 in the reply filed on 4/21/2008 is acknowledged.

Claim Objections

[2] Claims 1, 9, and 30 recite the limitation "the end face" in the instant claim. There is insufficient antecedent basis for this limitation in the claims.

Claim 5 recites the limitation "the bore" in the instant claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 112

[3] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[4] Claims 1, 9, 16, 18-21, 26, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3677

Regarding claims 1, 9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Also regarding claim 1, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 16, 18-21, 26, and 37 the phrase "or the like" (ring-like, groove-like, etc.) renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Applicant's cooperation is asked in ensuring that all other potential antecedent basis issues and 112 phrases such as "such as", "for example", and "ring-like" are not found/used in the claims.

Claim Rejections - 35 USC § 103

[5] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[6] Claims 1-5, 8-11, 14-32, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 196090252 C1, in view of Mueller, US-7,160,047.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such

Art Unit: 3677

that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 1, DE 196090252 C1 teaches of a method for producing an electrically conductive connection between an electrical terminal device (10) having a cut-out, such as a cable shoe, and a sheet metal part (8), in which a hollow fastener element (3) is rotationally fixedly riveted to the sheet metal part and an electrically conductive connection is hereby produced between the fastener element and the sheet metal part, wherein

a mount (33) for the electrical terminal device (10) is formed in the region of the end face (33) of the fastener element to which the electrical terminal device (10) is attached and prevents a rotation of the terminal device relative to the fastener element (10) and the sheet metal part (50) and in that a thread forming or thread cutting screw is screwed through the cut-out of the electrical terminal device and into the hollow fastener element (3) and there forms or cuts a thread by the screw-in movement (see fig. 4, the bore 49 ready for insertion of cutting screw of thread).

The difference between the claim and DE 196090252 is that DE 196090252 does not expressly state of the manufactured component assembly provided with an electrically non-conductive or poorly-conductive protective coating such as for example a paint layer or a powder coating. Mueller discloses a fastener similar to that of DE 196090252. In addition, Mueller further teaches of providing the fastener assembly with a protective coating such as a paint layer (see col. 3, lines 8-15 and col. 8 lines 1-10). It would have been obvious to one of ordinary skill in the art, having the disclosures of DE 196090252 and Mueller before him at the time the

Art Unit: 3677

invention was made, to modify the fastening assembly of DE 196090252 to possess a protective coating as in Mueller. One would have been motivated to make such a combination because the use of such a coating, as taught by Mueller, are known in the art of fasteners for their protection, corrosion resistance, resistance to scratching etc, characteristics.

Re: Claim 2, wherein the fastener element (3) is attached to the sheet metal part (8) so that it is secure against button-out.

Re: Claim 3, wherein the fastener element (3) is self-piercingly attached to the sheet metal part.

Re: Claim 4, wherein the mount (33) is formed by at least one projection (33) which projects beyond the end face of the fastener element.

Re: Claim 5, wherein the fastener element is executed with two projections (33) which are formed by two lugs having a spacing from one another and which are arranged to the side of the bore of the hollow fastener element (3).

Re: Claim 8, wherein the mount (33) is formed by a recess in the end face of the fastener element which merges into one or more radially extending grooves.

As for Claim 9, DE 196090252 C1 teaches of a hollow fastener element for the electrically conductive attachment of an electrical terminal device (10) such as a cable shoe, to a sheet metal part, wherein

the hollow fastener element (3) has a head part (31') and a tubular rivet section (31), with the rivet section (31) merging via a contact surface (81) for the sheet metal part into the head part (31'), wherein the hollow fastener element has a bore, for example a smooth cylindrical bore, at a point at which a thread is to be formed by screwing-in a thread cutting or

Art Unit: 3677

thread forming screw (see fig. 4, the bore 49 ready for insertion of cutting screw of thread) and in that a mount (33) for the rotationally secure attachment of the electrical connection device (10) to the fastener element is provided at the end face of head part (31') remote from the rivet section (31).

The difference between the claim and DE 196090252 is that DE 196090252 does not expressly state of features at the contact surface and/or rivet section providing security against rotation. Muller discloses a fastener similar to that of DE 196090252. In addition, Muller further teaches of features (38) providing a security against rotation so as to accomplish the same task. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art, having the disclosures of DE 196090252 and Muller before him at the time the invention was made, to modify the functional element taught by DE 196090252 to comprise anti-rotational features as in Muller, in order to prevent the functional element from rotation once joined to the sheet metal part.

Re: Claim 10, wherein the mount (33) is formed by at least one projection (33) projecting beyond the end face of the fastener element.

Re: Claim 11, wherein the fastener element (3) is executed with two projections which are formed by two lugs (33) having a spacing from one another which are arranged to the side of the bore of the hollow fastener element.

Re: Claim 14, wherein the mount (33) is formed by a recess in the end face of a fastener element which merges into one or more radially extending grooves.

Re: Claim 15, wherein a tubular guide section (38) is arranged concentric to the tubular rivet section (31) and radially inside the latter, with a ring gap (between 38 and 31) being

Art Unit: 3677

provided between the guide section (38) and the rivet section (31) and with the guide section projecting beyond the free end of the rivet section.

Re: Claim 16, wherein the free end of the wall of the ring-like rivet section (31) is rounded when viewed in an axial section plane both at the radially outer side and also at the radially inner side and has for example a semi-circular shape or a shape resembling an arrow-tip (see fig. 3a).

Re: Claim 17, wherein the ring gap has a radial dimension in the range between 0 mm and approximately 3 mm.

Re: Claim 18, wherein the ring gap finishes at an axial spacing before the ring-like contact surface (31) at the rivet section side of the ring-like contact surface (31).

Re: Claim 19, wherein the guide section (38) is formed as a piercing section and has a ring-like cutting edge at its end remote from the contact surface (31).

Re: Claim 20, DE196090252 as modified by Muller teaches wherein features (38) providing security against rotation are disposed at least one of in the region of the ring-like contact surface (31): the rivet section and the jacket surface of the head part adjacent to the contact surface.

Re: Claim 21, Muller teaches wherein features (38) providing security against rotation are formed by at least one of noses and groove-like recesses.

Re: Claim 22, DE196090252 as modified by Muller teaches wherein noses providing security against rotation are provided and are present in raised form at the contact surface (81) and at the rivet section (31) in the region of the transition from the contact surface to the rivet section.

Re: Claim 23, DE196090252 as modified by Muller teaches wherein said noses providing security against rotation extend in the radial direction at the contact surface (81) and in the axial direction at the rivet section (31).

Re: Claim 24, Muller teaches said features (38) providing security against rotation comprise noses and have one of a generally rounded shape and side flanks which lie in planes extending in the longitudinal direction of the element.

Re: Claim 25, the hollow fastener element has a hollow cylindrical region where the thread forming or cutting screw forms or cuts a thread cylinder said hollow cylindrical region being one of which is provided in the head part (31'), provided or in the guide section (38) and provided or at least partly in the head part (31') and in the guide section (38).

Re: claim 26, wherein said thread cylinder ends in the axial direction approximately at a position where said the ring-like gap ends.

Re: Claim 27, wherein said projection is formed by at least one lug and the or each lug (33) has a flank, which, on the attachment of a cable shoe, prevents rotation of the latter about the longitudinal axis of the functional element (3).

Re: Claim 28, wherein, at the position of the or each lug (33) the jacket surface of the head part (31') has a corresponding recess which, on the attachment of the functional element to a sheet metal part (8), serves as a security against rotation.

Re: Claim 29, wherein said rivet section (31) is a piercing and riveting section.

As for Claim 30, DE 196090252 C1 teaches of a component assembly consisting of a sheet metal part (8) and a hollow fastener element (3) attached to it via a rivet connection,

Art Unit: 3677

wherein the fastener element has a smooth cylinder bore for receiving a thread forming or cutting screw (see fig. 4, the bore 49 ready for insertion of cutting screw of thread) and the fastener element has a mount (33) at the end face remote from the rivet connection for the rotationally secure attachment of the electrical terminal device (10).

The difference between the claim and DE 196090252 is that DE 196090252 does not expressly state that wherein the fastener element is rotationally fixedly secured to the sheet metal part by means of features providing security against rotation and the fastener element and the sheet metal part are jointly coated with an electrically non-conductive or poorly conductive protective coating (120) and an electrically conductive path is provided between the fastener element and the sheet metal part at least at one of in the region of the rivet connection and at the features providing security against rotation. First, with respect to the former limitation above, Muller discloses a fastener similar to that of DE 196090252. In addition, Muller further teaches of features (38) providing a security against rotation so as to accomplish the same task. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art, having the disclosures of DE 196090252 and Muller before him at the time the invention was made, to modify the functional element taught by DE 196090252 to comprise anti-rotational features as in Muller, in order to prevent the functional element from rotation once joined to the sheet metal part.

Second, with respect to the latter limitation above, in addition, Mueller further teaches of providing the fastener assembly with a protective coating such as a paint layer (see col. 3, lines 8-15 and col. 8 lines 1-10). It would have been obvious to one of ordinary skill in the art, having the disclosures of DE 196090252 and Mueller before him at the time the invention was made, to

modify the fastening assembly of DE 196090252 to possess a protective coating as in Mueller. One would have been motivated to make such a combination because the use of such a coating, as taught by Mueller, are known in the art of fasteners for their protection, corrosion resistance, resistance to scratching etc, characteristics.

Re: Claim 31, wherein a thread cutting or forming screw is screwed into the hollow fastener element (3) and holds the electrical connection device at the fastener element (3) in the manner secure against rotation.

Re: Claim 32, wherein the mount (33) is formed by at least one projection (33) projecting beyond the end face of the fastener element.

Re: Claim 33, wherein the fastener element is executed with two projections (33) which are formed by two lugs having a spacing from one another which are disposed to the side of the hole of the hollow fastener element.

Re: Claim 36, wherein said mount (33) is formed by a recess in the end face of the fastener element which merges into one or more radially extending grooves.

Re: Claim 37, wherein said free end wall of the ring-like rivet section has one of a semi-circular shape and a shape resembling an arrow-tip (see fig. 3a).

Conclusion

[7] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of fastening assembly: please see submitted notice of reference cited.

[8] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

Art Unit: 3677

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached at (571) 272-6987. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Reese

/D. C. R./

Examiner, Art Unit 3677

/Robert J. Sandy/

Primary Examiner, Art Unit 3677